

## **IN THE CLAIMS:**

1. (Previously Presented) A method for performing bus arbitration, the method comprising:  
receiving, by a device driver layer from one of a plurality of applications included in an application layer, a request to perform a first device access operation on one of a plurality of end devices, the device driver layer including a plurality of device drivers that communicate with the plurality of end devices utilizing a bus;

each one of the plurality of end devices being connected to the bus;

determining, by the device driver layer, whether the one of the plurality of end devices is locked;

responsive to the one of the plurality of end devices not being locked, locking, by the device driver layer, the one of the plurality of end devices and performing the first device access operation for the one of the plurality of applications;

responsive to the first device access operation completing, unlocking the one of the plurality of end devices; and

another one of the plurality of applications performing a second device access operation to access another one of the plurality of end devices while the first device access operation is being performed, wherein the bus is not locked while the first device access operation is being performed and the one of the plurality of end devices is locked.

2. (Previously Presented) The method of claim 1, wherein the first device access operation is one of a read operation and a write operation.

3. (Previously Presented) The method of claim 1, further comprising:  
responsive to the one of the plurality of end devices being locked, denying the first device access operation.

4. (Previously Presented) The method of claim 1, wherein the step of determining whether the one of the plurality of end devices is locked includes determining whether an address of the one of the plurality of end devices is found in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.

5. (Previously Presented) The method of claim 1, wherein the step of locking the one of the plurality of end devices includes placing a device address of the one of the plurality of end

devices in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.

6. (Canceled)

7. (Previously Presented) The method of claim 5 wherein the step of unlocking the one of the plurality of end devices includes removing the device address from the list of occupied ones of the plurality of end devices.

8.-27. (Canceled)